

Device Modeling Report

COMPONENTS: RESISTOR
PART NUMBER: ERF10AJ680
MANUFACTURER: MATSUSHITA



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

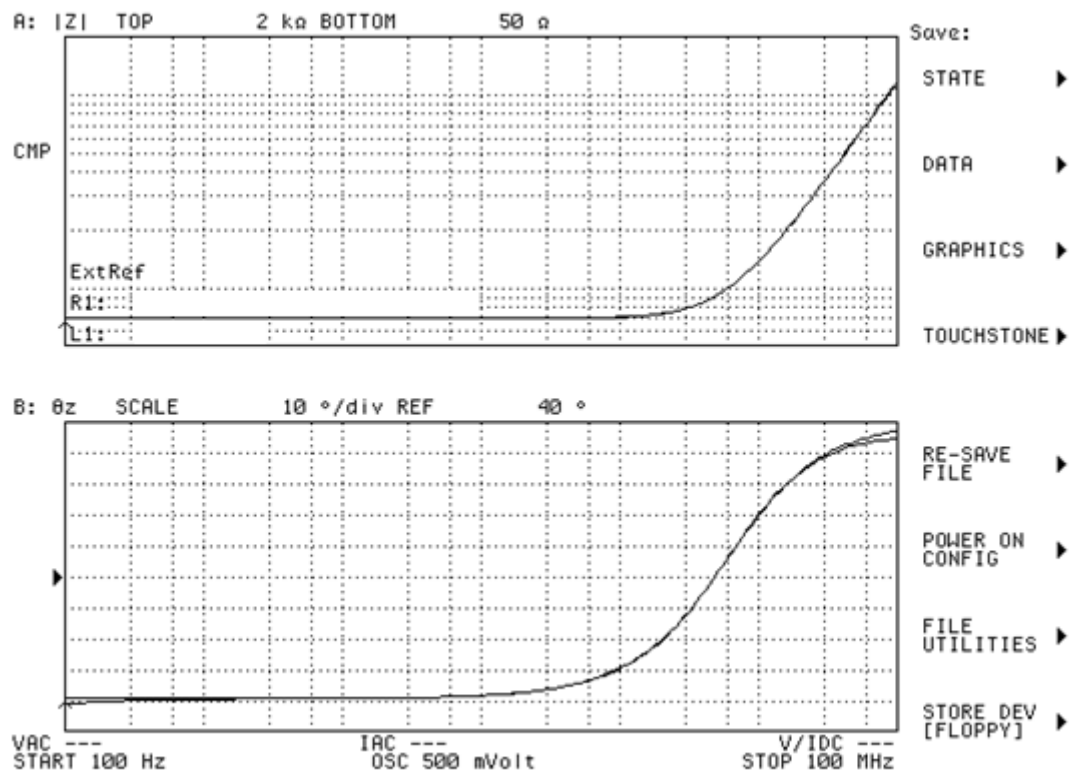
Optimization of Simulation

Range of adjustment Frequency: 100 to 100M(Hz)

Frequency vs. $|Z|$ and Frequency vs. θz Characteristic

Attention

Please use SPICE MODEL within the range from 100 to 100M(Hz)



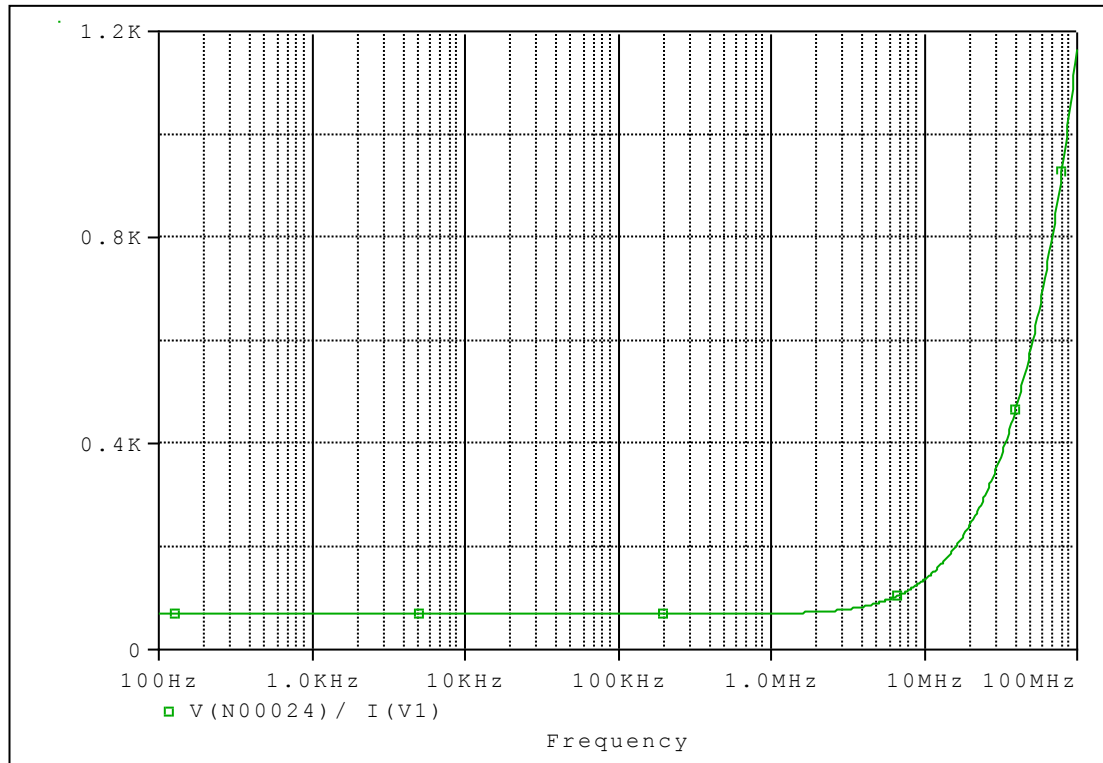
Measurement		
R1		
L1		
C1		

Equivalent circuit

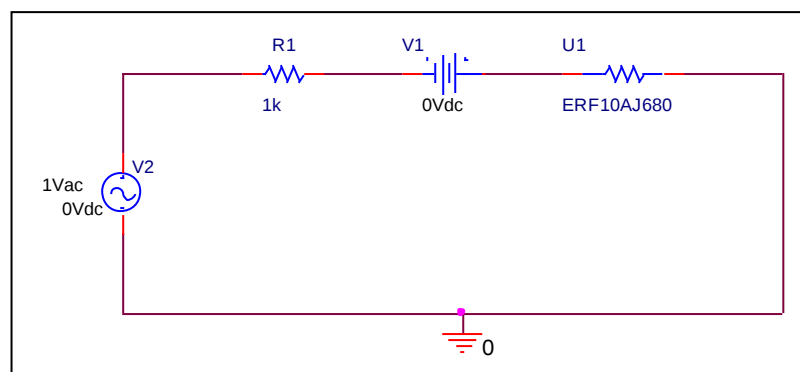


Frequency vs. |Z| Characteristic

Circuit simulation result



Evaluation Circuit



Simulation Result

Frequency(HZ)	Z (ohm) Measurement	Z (ohm) Circuit Simulation	%Error
100	68.694	69.297	0.878
1K	68.700	69.262	0.818
10K	68.707	69.262	0.807
100K	68.700	69.272	0.833
1M	69.779	70.233	0.650
10M	135.522	135.429	0.069
100M	1.117	1.165	4.283